# DR-9. Cu(II)-CATALYZED SYNTHESIS OF BENZO[4,5]IMIDAZO[2,1-*b*]THIAZOLE USING NITROALKENE AND 1*H*-BENZO[*d*]IMIDAZOLE-2-THIOL

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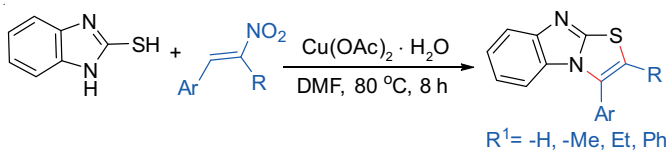
Imidazo[2,1-*b*]thiazole constitutes an important class of fused heterocycles owing to their pharmacological activities [1]. Specially, benzo[4,5]imidazo[2,1-*b*]thiazole moiety offers promising antimetastatic and immunomodulating properties which have been studied extensively for drug development [1]. Owing to the ability to take part in a wide range of organic reactions and easy accessibility through nitro- aldol condensation, nitroalkenes have been used to synthesize a number of heterocyclic systems [2]. Also, nitroalkene is bi-electrophilic in nature and could serve as potential precursor to form heterocycles by reacting with binucleophiles *via* cascade hetero-Michael addition reaction [3]. Herein. we disclose a Cu(II)-catalyzed coupling between nitroalkene and commercially available 1*H*-benzo[*d*]imidazole-2-thiol to afford imidazo[2,1-*b*]thiazoles [3].




Synthesis of benzo[4,5]imidazo[2,1-*b*]thiazoles

## References

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